



Queensland University of Technology
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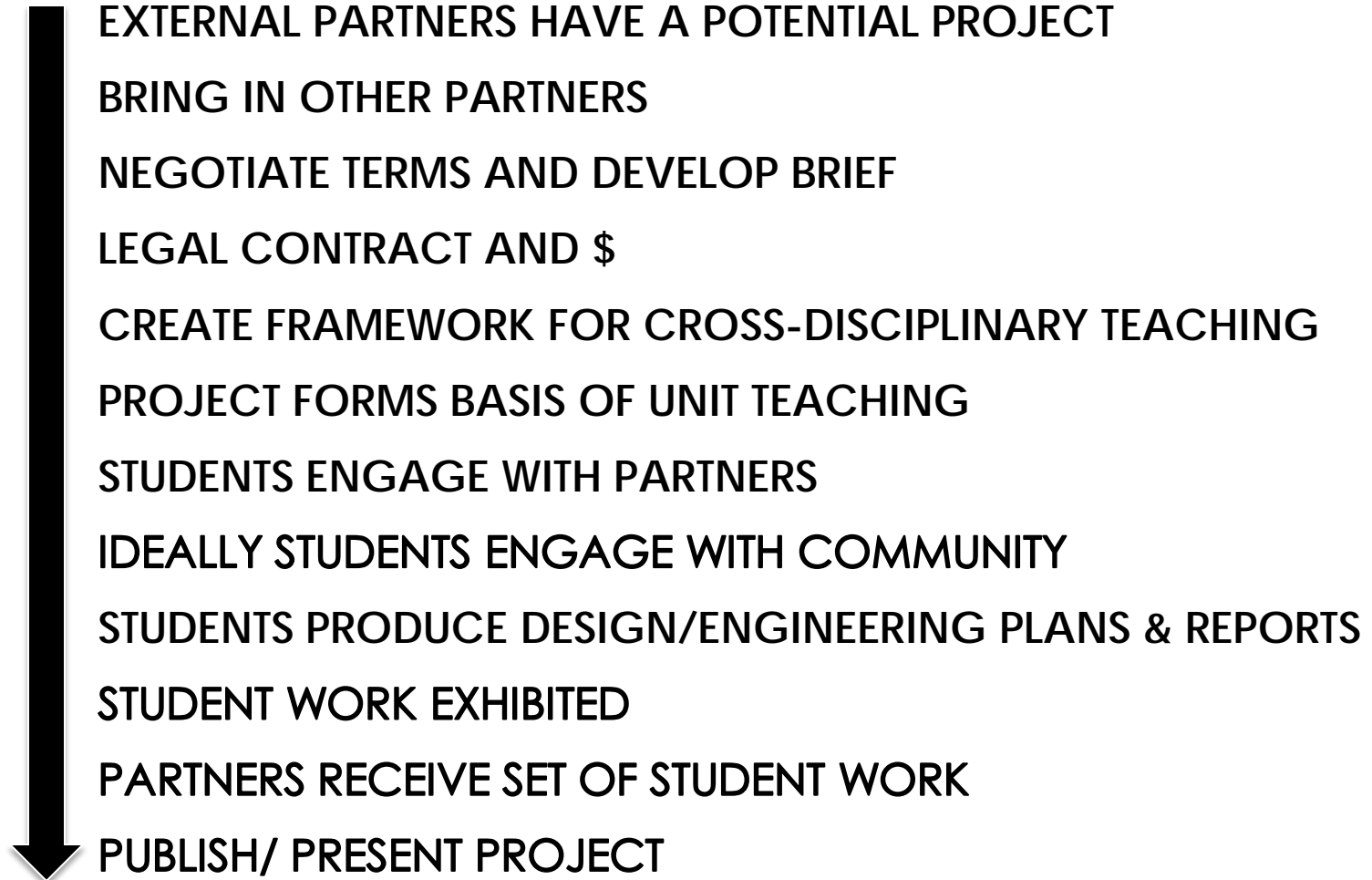


COMMUNITY ENGAGEMENT: CREATING SUSTAINABLE FUTURES BY DESIGN

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PROJECT PROCESS





PROJECTS TRAJECTORY

POONA 2006



BARGARA 2007



KARUMBA 2008



NORMANTON 2010



PORT OF BUNDABERG 2008



PORT OF BUNDABERG II 2010



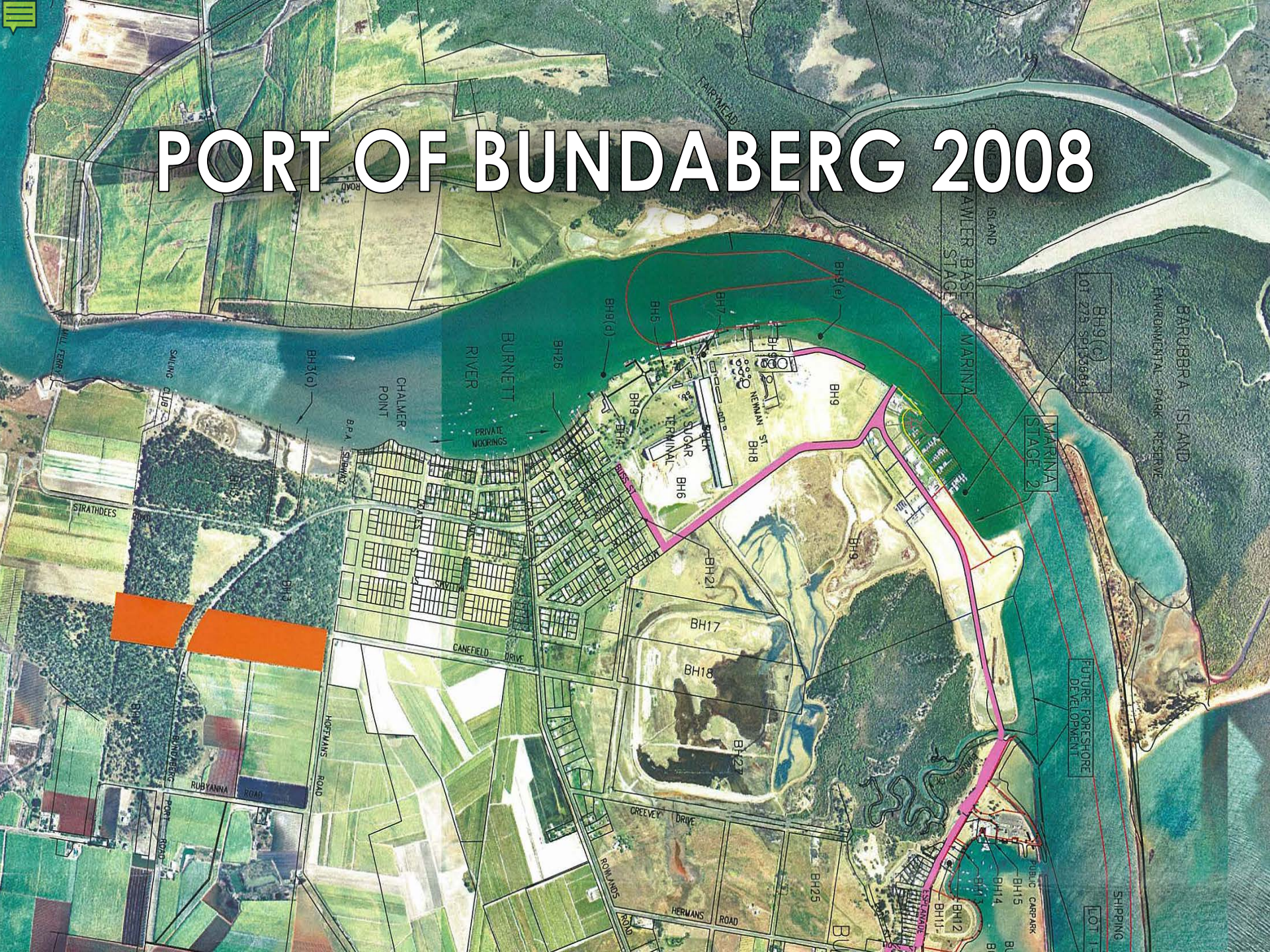
MAROOCHYDORE 2009



SUNSHINE COAST 2011

PROJECT	PARTNERS	ASSOCIATED ORGANISATIONS
POONA 2006	Poona Progress Association	Burnett Mary Regional Group Wetland Care Australia
BARGARA 2007	Burnett Shire Council	Burnett Mary Regional Group Wetland Care Australia LandCare Oceanwatch Australia
PORT OF BUNDABERG 2008	Burnett Mary Regional Group Port of Brisbane Corporation QLD Department of Local Government & Planning QLD Sustainable Economic Development Working Group	Burnett Heads Progress Association LandCare
KARUMBA 2008	Carpentaria Shire Council Karumba Progress Association	Ghost Nets Morr Morr Pastoral Company
MAROOCHYDORE 2009	Sunshine Coast Regional Council	Australian Institute of Landscape Architects
PORT OF BUNDABERG 2010	Burnett Mary Regional Group Port of Brisbane Corporation Burnett Heads Progress Association	Oceanwatch Australia
NORMANTON 2010	Carpentaria Shire Council	Morr Morr Pastoral Company
SUNSHINE COAST 2011	Sunshine Coast Regional Council	

PORT OF BUNDABERG 2008







Queensland University of Technology

PROJECT BRIEF

An Innovative Model for Engagement: Integrated Solutions to Sustainable Growth in Coastal Queensland

1.0 Project Overview

The partner organisations in this project recognise the need for a strategic and sustainable approach to intended future urban development, infrastructure and environmental planning in the Port of Bundaberg. In this project Postgraduate Landscape Architecture, and final year Civil and Environmental Engineering students will work over one teaching semester with guidance from QUT academics and partner organisations to produce strategic planning, environmental management planning and design options for managing future growth in the area.

The end product of this project will be student work which will offer a diverse number of alternative options for the future urban development, infrastructure and environmental planning that the partner organisations will be able to use for ongoing consultation. Elements of the student work will lend themselves to implementation, but it must be understood that further professional work will be required once partner organisations decide to implement particular plans, strategies, or designs. The beauty of this project's approach is the capacity for the students to offer partners a wide diversity of possible futures, a choice that is not available through conventional external consultancy processes.



2.0 Priority Issues Identified

Evaluate, undertake planning and design, and make recommendations regarding:

- Interface between Port lands and residential settlement;
- Future residential/urban development;
- Transport accessibility and mobility – road, rail, tramway and maritime for personal and freight movement;
- Local and regional connectivity – both physical and perceptual- between urban settlements of Port of Bundaberg – Burnett Heads and the surrounding area;

QUT

- Recreational and tourism development;
- Public/private space mix and access;
- Ecological conservation assets;
- Natural and cultural heritage assets

2.1 Interface between Port lands and residential settlement

The edge between Port lands and the existing and future residential settlements in the vicinity of Buss Street is of interest as both a physical and a perceptual edge. This is both a management boundary, and the 'face' of the Port to its immediate neighbours. At present this common edge is unclear and unfriendly.

2.2 Future residential/urban development

Existing residents are identified in Port of Bundaberg, with future residential development underway adjacent. Port of Brisbane also proposes future residential development along the foreshore downstream of existing residential settlement. These changes raise the following cultural issues:

- managing the socio-cultural mix harmoniously;
- enhancing what is valuable in existing local character.

These changes raise the following environmental issues:

- creating a sustainable balance between urban development and the health of the natural environment;
- creating sustainable forms of residents' access to that natural environment.

These changes raise the following infrastructural issues:

- provision and location of sustainable infrastructure and services.

These changes raise the following socio-economic issue:

Creating and managing a sustainable socio-economic balance between existing residents (in aging housing stock), and new residents (responding to high property prices).

2.3 Transport accessibility and mobility

Recognising the issues identified in 2.2, transport accessibility and mobility needs evaluation, planning and design in the areas of tourism, commercial, residential, agricultural, and industrial transport routes and infrastructure. This encompasses rail, tramway and maritime transport for personal and freight movement.

2.4 Local and regional connectivity

There is a need to evaluate, plan and design in response to desired levels of both physical and perceptual connectivity between the urban settlements of Port of Bundaberg, Burnett Heads and the surrounding area.

2.5 Recreational and tourism development

The inevitable growth of recreational and tourism demand on the area needs to be sustainably catered for. Both active and passive recreation should be considered; for example, ranging from provisions for walking, picnicking, and fishing, through to sports and boating.

2.6 Public/private space mix and access

Equity in terms of public access to natural and cultural assets can be addressed, and the balance of this access with quality of life for private residents in the face of expanding residential and tourism.

2.7 Ecological conservation assets

The biodiversity of forest areas, mangroves, foreshores, estuarine and marine environments, and the fauna they support are of high importance in the consideration of all other issues. The health of these assets will be considered paramount in achieving the best overall outcomes for the project.

2.8 Natural and cultural heritage assets

Natural and cultural heritage assets need evaluation and conservation where appropriate and desirable. Public access to and interpretation of these is desirable to ensure they are valued. Natural heritage assets may include remnant vegetation communities or individual species of significance. Cultural heritage assets may include housing stock representing distinctive eras of Queensland architecture, industrial or fishing infrastructure representing past ways of interacting with the place.

2

QUT

QUT

3

QUT





Port of Bundaberg - Where RIVER meets SUGAR meets LIVING meets BUSH. Exploring landscape change through storyline.



vision for local recreational boating precinct

This zone of **interface and interconnection** along the Burnett River will incorporate sustainable **interaction** with the river, while adapting to the **changing nature** of this naturally and culturally important tidal zone.

this vision will be achieved by aims describing the processes of change to, within and between:

change to

converge
to adapt and transform existing elements

Enhance and adapt existing sailing club facilities, and create a local recreational boating precinct.

Retain and enhance existing important influences on the tidal zone, including drainage patterns and vegetation communities.

change within

converge
to bring together changing internal elements

Develop recreation opportunities related to the boating precinct, and minimise access conflicts between pedestrians and vehicles/vessels.

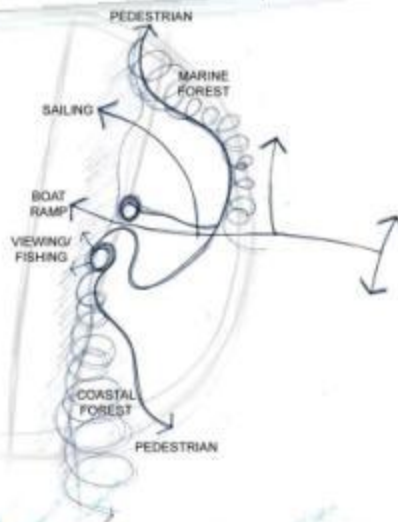
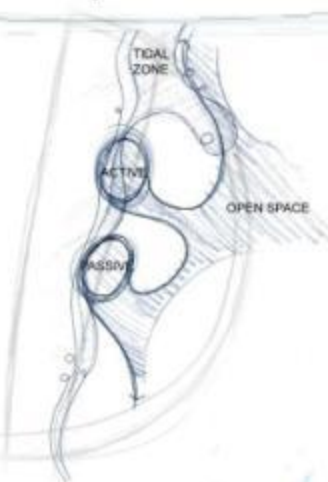
Acknowledge the importance of the processes of change within and between functional tidal zones, and balance this natural change with human interaction.

change between

converge
to engage in exchange between elements

Establish pedestrian and vehicular access that will connect the boating precinct with other local recreation, residential and tourism areas.

Balance natural and cultural values associated with the river through natural system regeneration and connectivity, sensitive access, interaction and interpretation.



the existing site character

The detailed design area has a low key and local character. This detailed design strives to enhance this by looking at how the local lifestyle embraces interaction with river.



SNAIL

JANE HULME - PSP271 ADVANCED DESIGN ONE - SEMESTER 1, 2008

THREE HONEY - SNAIL ADVANCED DESIGN ONE - SEMESTER 1, 2008

SNAIL

strategic plan context



zooming in on the existing and the strategy



zooming in again, the site ('zone of interface and interconnection', above) is where existing river, salt, grazing and bushland converge. The zone of interface and interconnection is sensitive to change.

RIVER

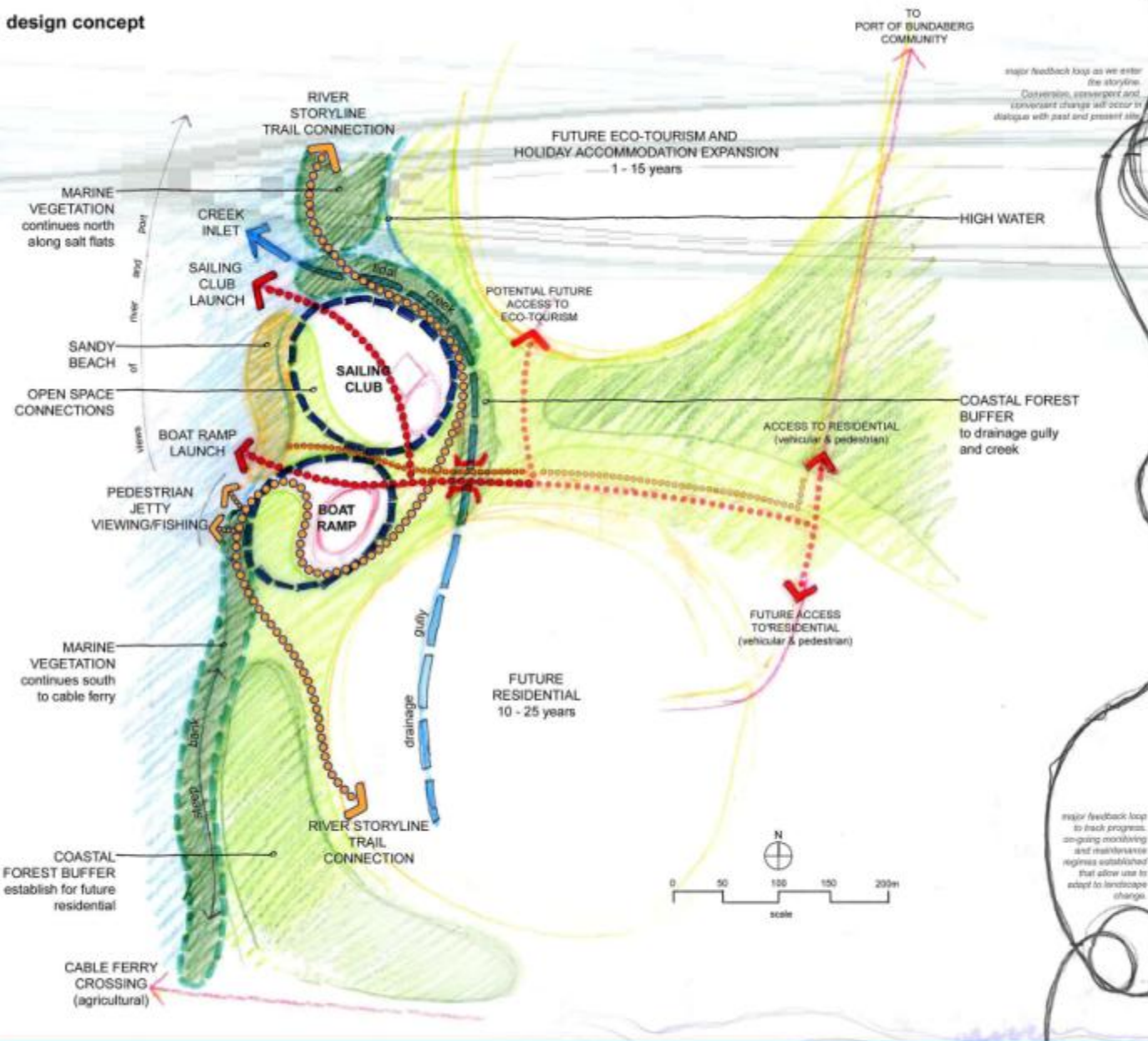
the port of bundaberg where RIVER meets sugar meets living meets bush

a 'river' interface design derived from landscape storylines

a 'river' interface design derived from landscape storylines

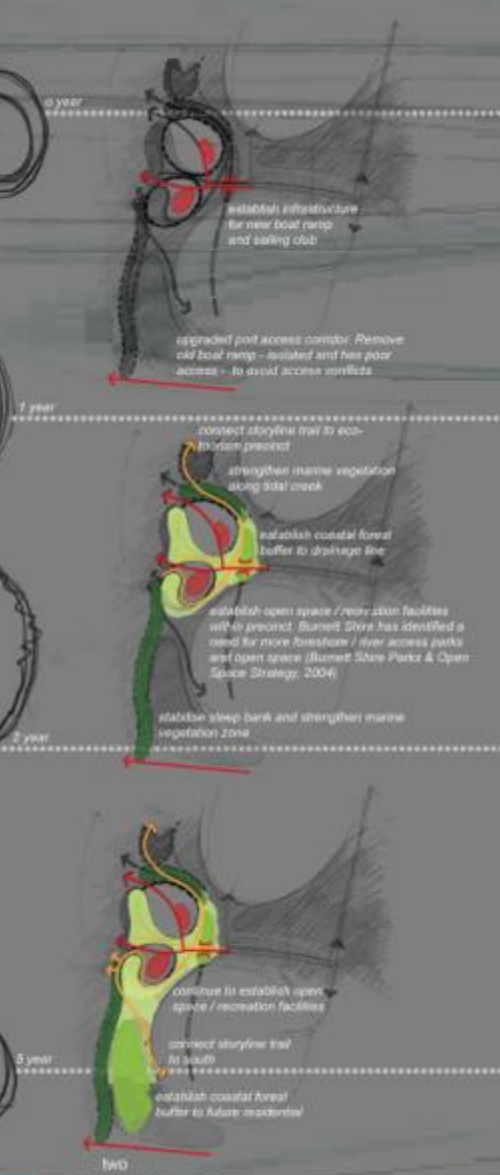
meets sugar meets living meets bush

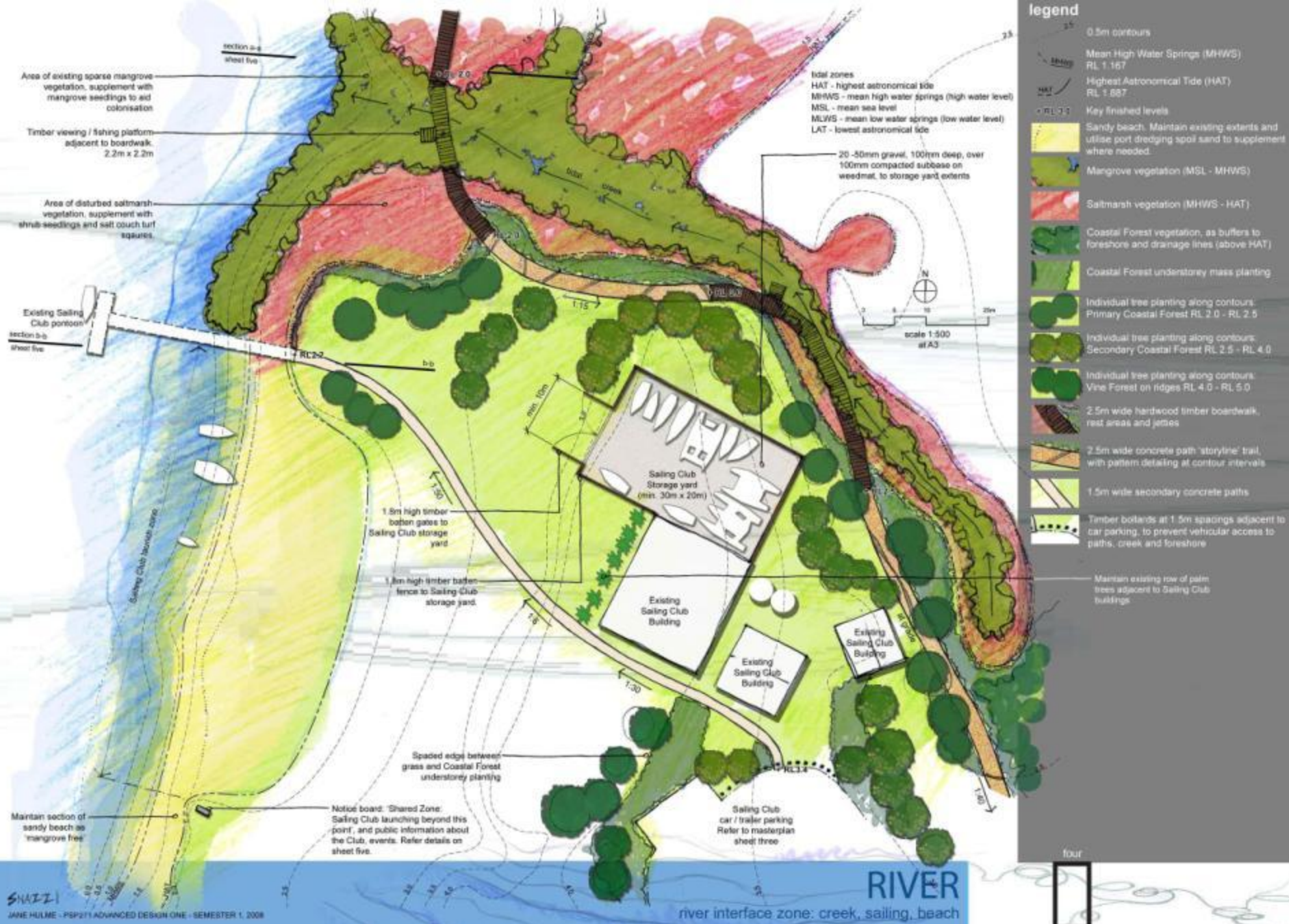
design concept



the storyline of landscape change: phasing

sits within the 0 - 5 year strategy from Strategic Plan





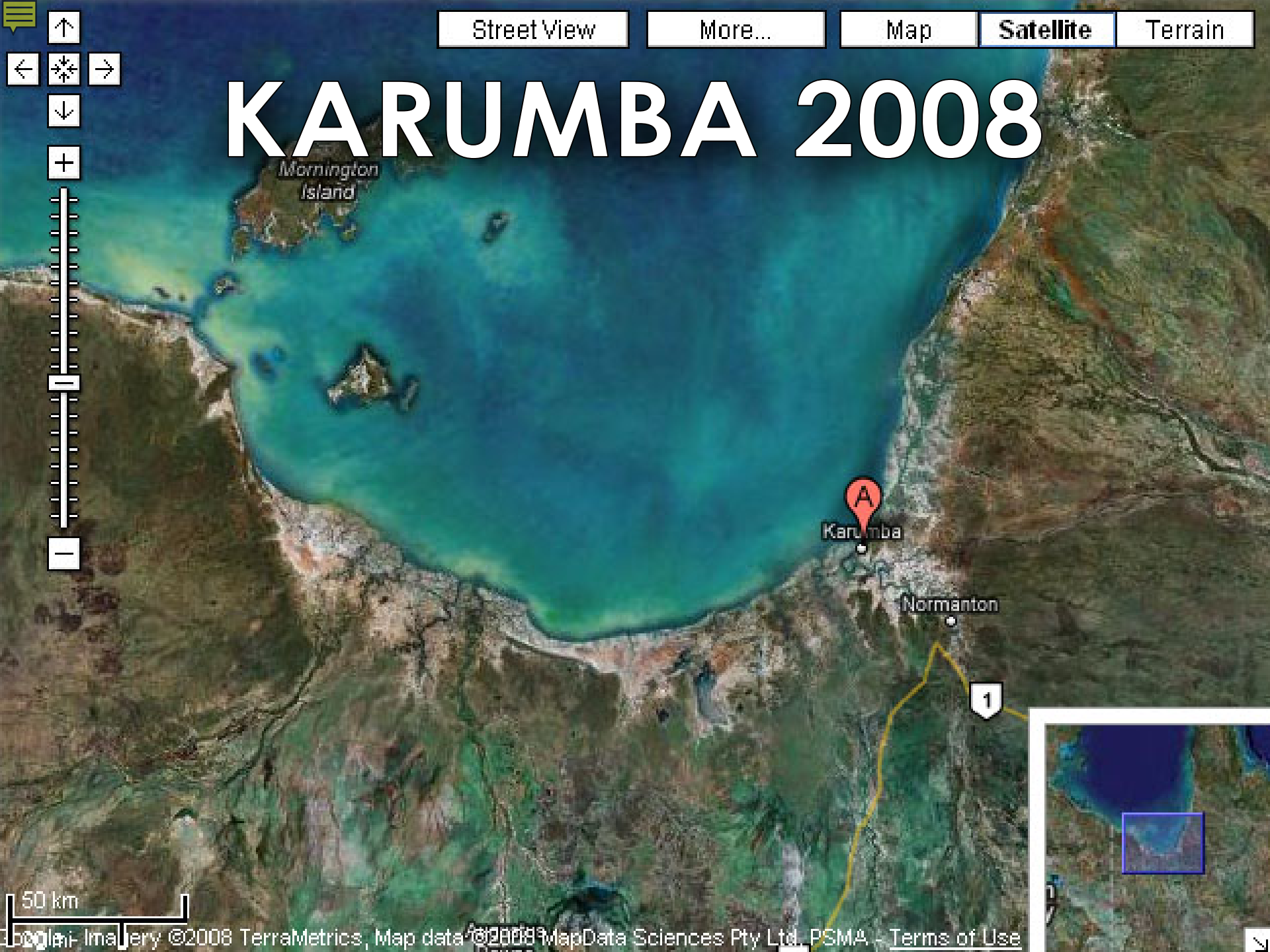












Street View

More...

Map

Satellite

Terrain

KARUMBA 2008

Mornington Island

Karumba

Normanton

1

50 km



Linking Karumba: Creating Sustainable Connections

1.0 Project Overview

Karumba is a town situated at the mouth of the Norman River on the Gulf of Carpentaria in Queensland.



Fig 1: Location of Karumba township on the Gulf of Carpentaria (Google Maps 2008)

It is a town with two centres: Karumba Point, and Karumba township. The township is 2.5km upstream of the Norman River from the Point, a journey currently only achievable by a trip of 8-9km by road (accounts differ). The Karumba Seawall runs for approx. 600m along the riverfront in the township. The Barra Farm is a further 2 km upstream from the township centre, connected by road: 11km by road from Karumba Point.



Fig 2: Locations of interest within Karumba (adapted from Carpentaria Shire Council, 2006)

location and Carpentaria Shire Council recognise the need for a spring social, economic, environmental and cultural sustainability in the of physically linking these strategic points in the town as a part of such a future.

of civil engineering, planning and design students (architecture, spatial design, interior design) will work over one teaching in QUT academics and partner organisations to produce strategic toward creating this linkage.

Identified

Karumba are to foster:
gaps
omic development

ages: encouraged through a common purpose to encourage a and increased social interaction.

a township include: a supermarket, bakery, café, hotel, shops, an centre, fuel and vehicle repairs, caravan park. The majority of ship, including some riverfront properties. The government of, fire service, police, health/medical centre, child care, sports civic centre, library. Industrial riverfront properties: mainly maritime (barman and fishing cold stores, bulk fuel storage, barge operators, no council depot.

r tourism more than residential infrastructure. Existing facilities (avenue and motels on the river and beachfronts, the airport, shops, private housing but the number is increasing.

between Karumba Point and Karumba township is a considerable Point wanting to post a letter, go to the medical centre, go out for ant in the township wishing to access any of the facilities at the end to a bit of an 'us and them' syndrome, wherein Point more affluent as the location is more holiday beach orientated ship of Karumba.

omic development: especially through enhanced tourism and, and niche industries celebrating Karumba. While the town is it benefit from expanded opportunities to develop self-funding

mba are increasing. Currently tourists tend to either be long-ived income into the local economy. Karumba receives about 27552 visitor nights (Grainer, 2002/03) and increasing. These areas of fish and economic injection is around \$11.3 M per annum. other tourists who only make single night stays. The opportunity er group to stay longer and thus inject greater wealth into the local er access to and understanding of the subtle beauty of Karumba's , and to the sustainable fishing, boating and other activities nvironments.

ity: to protect the sensitive gulf ecosystems whilst providing awareness of this subtle environment.

et of the Carpentaria Tropical Savanna Ecosystem. The town of plain, where the Norman River drains into the Gulf, surrounded less brackish wetlands. Freshwater is probably injected into the

or where overland water occurs, then reverting to salt

cribed by the Australian Government as comprising

in Australia, significant waterbird habitat

and breeding, feeding and roosting

national significance for waterbirds

nesting

bird breeding, feeding and roosting

re listed as threatened on state listings

Natural Resources Atlas: www.anra.gov.au/natural-resources.html. Last update: 16 November 2007)

to and respect the participation of all cultural groups

strengthening the cultural character of Karumba.

in Karumba are the Gukutham People and Kurltjar (Title claim over the area of the Karumba seawall by where indigenous deceased were buried. For example, have been built atop a burial ground. Today few do not stay in the town after dark. The river edges and are likely to have occurred.

identified. Existing structures along the seawall may re from WW1, such as an air raid shelter on the is shelter is so precarious it may not be salvageable. (Anra 2002; Parsons Innochem 2006)

ities

ip: Karumba Interpretive Walk

rm

ship: Karumba Interpretive Walk

plan for the Karumba Interpretive Walk between , providing a 2.5 km route traversable by foot or ive been constructed, with the remainder awaiting a interests in specific lands. The Masterplan identifies outlines the ideal route for the walk (route identified in and into future elements yet to be detailed. These interpretation of the landscape to review and design for Ideas could be generated for associated activities stage walks, or bicycle hire.

in Karumba's industrial and natural heritage. It's Karumba Linkage walk could provide opportunities to al conservation with industrial zinc processing.

washing into the sea; however the wall is collapsing; wall there is the potential for increased sedimentary dential in places to create a walk along the top of the mba Point to the Barra Farm.

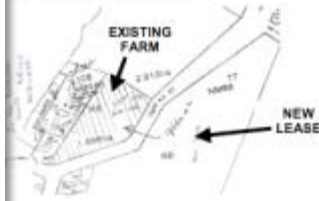
g to the Barra Farm to capitalise on and improve the existing links between Karumba Farm, currently achievable by a 2km road trip.

the Gulf Barramundi Restocking Association (GBRA), is a working action. In the light of the Farm's imminent expansion into a land lease facility (see Fig 2), the GBRA has identified a set goals for their st to its role in Karumba and the region, including:

ing tourism potential, particularly for recreational fishing, and families response to Karumba's growing tourism market; ter training and work experience opportunities within the region in urnal and business; international aquaculture research presence through expanded

dures on natural ecosystems caused by recreational fishing in natural

understanding and practice of nature conservation in the community, ng economic growth in the region.



existing location and new lease (provided by Gunn, 2008)

Centre at the farm have been prepared by the Scribbly Gum s will provide a focal point for the achievement of many of the above as appropriate siting within the Barra Farm lands, and the planning of est of Karumba.

ve river-based tourism exist, with the Barra Farm as an ideal starting or lonal fishing and boating are popular, however opportunities may be entary forms of recreation which do not place increased burdens on this brief describes the environmental attractions of the river and ifful landscape which is rarely the focus of tourism interest, compared ns and forests. Opportunities may exist to provide an interpretive sitings to discover this landscape.

ing wharfs and boat ramps along the river in this area, and more e behind the Barra Farm. Some of these may have the potential to play of the Karumba linkage.





LINKING KARUMBA: THE TOWN, THE POINT & BEYOND



LINKING KARUMBA: SHAPING ITS FUTURE REALISING THE SYSTEMS



VISION
SHAPE THE FUTURE
OF KARUMBA REGION
THROUGH THE STRENGTHENING
AND REALISATION OF SYSTEMS
TO CREATE A DYNAMIC, ROBUST
AND INTERCONNECTED ENVIRONMENT.



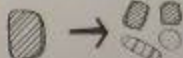
**MANAGEMENT
STRATEGY**



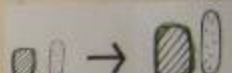
CLUSTERING
LAND USES
+ ACTIVITY

MANAGING
TOWN, INFRASTRUCTURE + LOCAL
DEVELOPMENT PRACTICE

EDUCATING
THROUGH
INFRASTRUCTURE
+ PROGRAMS



RIVERSIFYING
ECONOMIC
OPPORTUNITIES



**MAINTAINING +
SUBSIDISING**
LOCAL + REGIONAL
ADMINISTRATIVE
STRUCTURES + PROGRAMS



MARINE NODES

**INDUSTRIAL
MANAGEMENT**

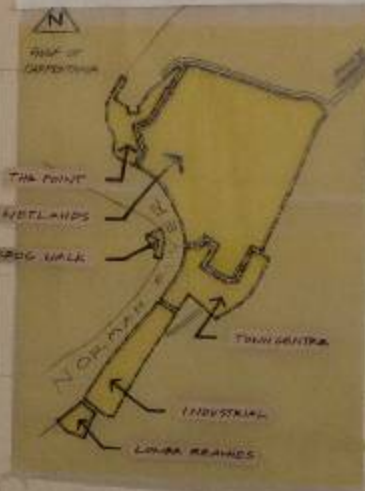


**CULTURAL +
WILDLIFE
DISCOVERY PRECINCT**

**ECO-RESORT
PRECINCT**

**NATURE-BASED
RECREATION**

**STRATEGIC DEVELOPMENT
PRECINCTS**



LINKING KARUMBA

SWITCHING...

UNIFYING...

DIVERSIFYING...



"To UNIFY the future of KARUMBA by SWITCHING the diverse interests towards a COMMON ground..."



EDUCATIONAL RELATIONSHIPS



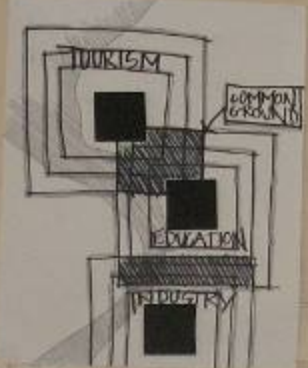
COMMUNITY STRENGTH



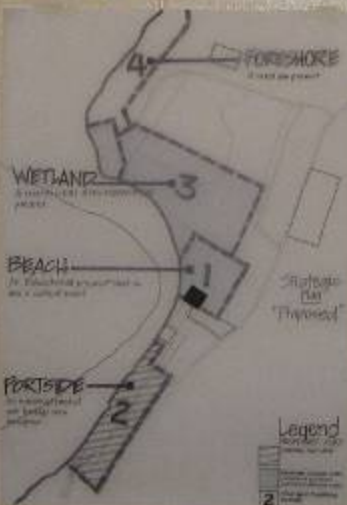
ECONOMIC VIBRANCY



ECOLOGICAL CONSERVATION



MAKE THE SWITCH



BEFORE the SWITCH

AFTER the SWITCH

LINKING KARUMBA

SWITCHING...

UNIFYING...

DIVERSIFYING...



EDUCATIONAL
RELATIONS

COMMUNITY
STRENGTH

ECONOMIC
VARIANCY

ECOLOGICAL
CONVERSION



MAKE THE SWITCH



BEFORE the SWITCH

AFTER the SWITCH





DEVELOPING AND MAINTAINING THE PARTNERSHIPS

GIVING AND RECEIVING

EXPECTING THE UNEXPECTED

ADMINISTRATION ...

ENJOYING THE REWARDS



GIVING AND RECEIVING



GIVING AND RECEIVING

DURING THE PROJECT

- Establish and maintain clear communications amongst all parties
- Expect the workload to be at least 3x that needed to teach the unit without an engagement project
- Prioritise the project **PROCESS** as much as the outcomes, and reflect this attitude to all parties

THUS increasing the chances of expectations being mutual and realistic

- and surpassed!!



EXPECTING THE UNEXPECTED



A BRIEF WORD ON ADMINISTRATION

ALWAYS:

- Get viewing access to all your project accounts and keep an eye on what is going in and out
- Check with QUT finance that the terms of your account match your needs
- Keep copies of absolutely everything
- Have a project co-ordinator or very clear areas of primary responsibility

ENJOYING THE REWARDS

HAPPY PARTNERS:



ENJOYING THE REWARDS

REEEALLLLLY HAPPY PARTNERS:

Very impressive

Very distinctive

Better ideas than any highly paid consultant

Makes perfect sense.

~~SECRET~~



ENJOYING THE REWARDS

HAPPY STUDENTS:



ENJOYING THE REWARDS

HAPPY STAFF:






ENJOYING THE REWARDS

HAPPY EVERYONE:





COMMUNITY ENGAGEMENT: CREATING SUSTAINABLE FUTURES BY DESIGN



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